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Reviewing unethical behaviors of primary education students' internet usage

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Abstract

It is known that the internet whose user number has been increasing day by day causes ethic problems besides its advantages. It is essential to get individuals adopt the habit of using the internet according to ethical rules since their primary education school ages in terms of preventing related problems in society. The general aim of this study is to determine the unethical internet usage behaviors of primary students in terms of various variables. The study group of this descriptive research consists of 6, 7 and 8th grade students (n=1761) attending various primary education schools. The data collection instrument developed by the researchers contains items about demographic characteristics and unethical behaviors. Frequency (f), percentage (%) and Chi-square (X^2) test of independence were used in data analyses. Research findings revealed that the gender, the duration of internet usage and the situation of connecting the internet in a cafe are affecting almost all unethical behaviors which are exhibited and exposed. Accordingly the following suggestions were made; students, families and teachers should be informed about using the internet considering ethical rules; students' duration and places of internet usage and internet activities should be controlled by their parents; related legal and technical precautions should be taken; studies should be carried out in order to improve the internet cafes and investigate the causes of unethical internet behaviors among primary education school students.

Keywords: internet ethics; unethical internet behavior; primary education students

1. Introduction

Nowadays, people often need computer and internet to carry out their daily works. Many activities such as; file transfer, getting information, fun, research, shopping, communication, chat, banking transactions, following the news, utilisation of civic services are realised by using computers and internet. Today, technology has reached to a level that it can offer numerous possibilities. However, it is a fact that because of the possibilities of easy access, file download, copy and paste, ethical problems have become more important and worrisome. (Ben-Jacob, 2005; Namlu & Odabaşı, 2007; Whitehead, 2007; Masrom, Ismail & Hussein, 2008; Beycioğlu, 2009; Kuzu, 2009; Karim, Zanzuri & Nor, 2009; Davinson & Sillence, 2010; Eldakak, 2010; Barnes, Schaubroeck, Huth & Ghumman, 2011).

Computer ethics is a dynamic and complex field of study which deals with the relations among facts, conceptualizations, politics and values in relation with constantly developing computer technology (Şendağ & Odabaşı, 2006). Moor (1985) used the concept of computer ethics in a sense to implicate computer and network technologies and their software. In parallel with the rapid development of the internet, unethical behaviors that arose

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through internet and internet technologies have been distinguished as a new subject matter and therefore some researchers have used the terms of internet ethics and cyberethics (Fox, 2003; Kuiper, Terwel & Wolman, 2005; Şendağ & Odabaşı, 2006; Beycioğlu, 2009; Lee, 2010). Internet ethics, accordingly, has been defined as a concept that expresses how the people should behave while they are using the internet (Torun, 2007). Freestone and Mitchell (2004), used the term "abnormal behavior" to explain the unethical use of the internet.

Ethical behaviors have been defined as legal behaviors that can be accepted as moral in the society in which it emerged while unethical behaviors have been defined as illegal behaviors that cannot be accepted as moral (Barnes, Schaubroeck, Huth & Ghumman, 2011). In consideration of this information, the behaviors that are the result of internet use and that are illegal or are not socially accepted as moral can be expressed as unethical internet behaviors. When the related literature is examined, it is noted that the researchers have defined many unethical internet behaviors such as; sending spams, using unlicensed software or copying software, use or spread of private information without permission, use of others' publications without giving reference, entering the virtual environments which are not suitable at internet cafes, giving misinformation and making shameful talks over the internet, sending malicious viruses, gambling, harassment and racial or ethnic accusation on the internet, affront, threaten, violation of copyright laws (Rader, 2002; Kruger, 2003; Mollavelioğlu, 2003; Çevik & Kuzu, 2006; Şendağ & Odabaşı, 2006; Erdur-Baker & Kavşut, 2007; General Directorate of Family and Social Researches [ASAGM], 2008; Arıcak et al., 2008; Akman & Mishra, 2009; Lee, 2010).

The increase of unethical use of the internet is inevitable when we consider that the access to the internet has become easy and widespread. Therefore, it is necessary to gain the individuals the behaviors to use the internet in accordance with the codes of conduct since they are at elementary school. When the relevant literature is examined, it can be noted that there are studies on unethical use of the internet that are carried out on different samples (Mollavelioğlu, 2003; Birinci & Odabaşı, 2006; Çevik & Kuzu, 2006; Kılıçer & Odabaşı, 2006; Odabaşı & Uysal, 2006; Uysal, 2006; Erdur-Baker & Kavşut, 2007; Torun, 2007; Akbulut, Uysal, Odabaşı, & Kuzu, 2008; Arıcak et al., 2008; Beycioğlu, 2009; Kuzu, 2009). In addition to these, a nation-wide research to learn the ideas of family members on internet security and ethics has been carried out by General Directorate of Family and Social Researches (ASAGM, 2008). The appreciations of family members (parents and children) on internet security and ethics have been examined in terms of different variables. According to this research, the most problematic issues are entrance to the websites that contain pornography, violence, terror and gambling; the least problematic issues are use of websites for homework, shopping and banking transactions (GDFSR, 2008). Apart from these, no studies examining the behaviors that elementary education students display through the internet and the unethical behaviors they are exposed to have been encountered.

The general aim of this study is to determine the state of the unethical behaviors of the elementary school students that arise from their use of the internet in terms of different variables. Accordingly, answers to the following questions will be sought: What are the unethical behaviors that the students display on the internet? Is there a relation between the students' unethical behaviors and gender, duration of internet use and the place where the internet is used? What kind of unethical behaviors are the students exposed to through the internet? Is there a relation between the unethical behaviors that the students are exposed to and gender, duration of internet use and the place where the internet is used?

2. Method

The study is based on screening model. The workgroup consists of 6, 7 and 8 grade students (n=1761) that were chosen unbiased from 19 state elementary schools in the city of Bolu and its districts in the academic year of 2009-2010. The data collection tool formed by the researchers contains items to determine the demographic information and unethical behaviors of the participants. The items related to the unethical behaviors have been formed by expert opinions and literature review. Frequencies (f) and percentages (%) were calculated in the descriptive analysis of the data; chi-square test of independence, (X^2) which is a nonparametric test, was used to determine the relations between unethical behaviors and gender, duration of internet use and the place where the internet is used. In X^2 test of independence, which is used to determine the probable relation between two variables, if the value of X^2 is small

(or p>.05), it signifies that the two variables are independent; if the value of X^2 is big (or p<.05), it signifies that the two variables are related (Tabachnick & Fidell, 2007).

3. Findings and Comments

In line with the subsidiary aims of the study, the findings and comments attained from the data collection tools have been discussed under the subheadings of "The demographic characteristics of the participants", "Unethical behaviors displayed" and "Unethical behaviors exposed".

The demographic characteristics of the participants: The ratio of the male and female students attending the study is close to each other (50.1% female (n=882), 49.9% male (n=879)). This finding is consistent with the statistics of National Education (formal education) (MEB, 2009). When the internet use time at one time is examined, the ratio of the non-internet users is 5.3% (n=94), the ratio of the students using the internet for less than 30 minutes is 17.1% (n=301), the ratio of the students using the internet for 30 minutes - 1 hour is 44.3% (n=781), the ratio of the students using the internet between 2-3 hours is 26.3% (n=463) and the ratio of the students using the internet for more than 4 hours is 6.9% (n=122). As is seen in the related data, nearly half of the students use the internet for 30 mins - 1 hour. 63.4% of the participants (n=1116) have stated that they use the internet at home, 40.3% (n=710) at school and 27.1% (n=478) at internet cafes. When the related data are taken into consideration, it can be stated that the students mostly prefer their homes to use the internet.

The unethical behaviors displayed: The ratio of the female and male students that display unethical behaviors through the internet and their chi-square results in relation with gender difference have been demonstrated in Table 1.

Table 1. Gender X Unethical behaviors displayed through the internet

Unethical behaviors displayed through the internet	Female %(f)	Male %(f)	General %(f)	Chi-square (df)	p
Using pirated software	13.4 (118)	23.7 (208)	18.5 (326)	30.87 (1)	.000*
Accessing private information on the computer without permission	2.0 (18)	9.2 (81)	5.6 (99)	42.70 (1)	.000*
Using ready-made homework websites	34.6 (305)	46.8 (411)	40.7 (716)	27.06 (1)	.000*
Disturbing people on the internet	1.7 (15)	7.2 (63)	4.4 (78)	31.08 (1)	.000*
Use of materials such as, music, picture, film, program and files without permission	10.2 (90)	18.8 (165)	14.5 (255)	26.10 (1)	.000*
Giving misinformation over the internet	2.5 (22)	6.4 (56)	4.4 (78)	15.63 (1)	.000*
Making shameful talks over the internet	2.6 (23)	5.0 (44)	3.8 (67)	6.10 (1)	.009*
Entering websites containing pornographic content	0.9 (8)	7.6 (67)	4.3 (75)	48.69 (1)	.000*
Entering websites containing violence and terror	0.9 (8)	7.6 (67)	4.3 (75)	48.69 (1)	.000*
Using friendship websites	15.0 (132)	24.7 (217)	19.8 (349)	26.18 (1)	.000*
Trusting the strangers and chatting with them	2.2 (19)	5.5 (48)	3.8 (67)	13.15 (1)	.000*
Sending emails containing viruses intentionally	5.1 (53)	14.2 (147)	9.6 (200)	50.08 (1)	.000*
Overloading inboxes and blocking mail boxes	7.0 (73)	13.0 (135)	10.0 (208)	21.33 (1)	.000*
Forcing people to leave chat-rooms or game websites	6.0 (63)	13.7 (142)	9.8 (205)	34.79 (1)	.000*
Using other people's names in order to cause them to suffer by sending emails or videos	5.2 (54)	10.3 (107)	7.7 (161)	19.58 (1)	.000*
Publishing websites that will cause harm	3.2 (33)	7.3 (76)	5.2 (109)	18.42 (1)	.000*
Hacking email accounts and doing harm	6.7 (70)	16.5 (171)	11.6 (241)	49.20 (1)	.000*
Publishing negative information about others on the internet	3.5 (37)	8.0 (83)	5.8 (120)	19.28 (1)	.000*
Spreading personal information through emails	3.8 (40)	8.4 (87)	6.1 (127)	19.10 (1)	.000*

* p<.05

As can be seen in Table 1, the most repeated unethical behaviors that both female and male students display are respectively, using ready-made homework websites (female 34.6%, male 46.8%), using friendship websites (female 15.0%, male 24.7%) and using pirated software (female 13.4%, male 23.7%). While female students enter the websites having terror or pornographic content at a minimum level (0.9%), the least repeated behavior that the male students display on the internet is making shameful talks (5.0%). When the chi-square results are examined, it is seen that all the unethical behaviors displayed are related to gender (all p<0.5).

The results of chi-square analysis to determine the relation between unethical behaviors displayed through the internet and the duration of the internet use are given in Table 2.

Table 2. The duration of the internet use X The unethical behaviors displayed through the internet

Unethical behaviors displayed through the internet	Chi-square (df)	p
Using pirated software	36.93 (4)	.000*
Accessing private information on the computer without permission	62.96 (4)	.000*
Using ready-made homework websites	33.50 (4)	.000*
Disturbing people on the internet	22.56 (4)	.000*
Use of materials such as, music, picture, film, program and files without permission	60.63 (4)	.000*
Giving misinformation over the internet	24.31 (4)	.000*
Making shameful talks over the internet	29.13 (4)	.000*
Entering websites containing pornographic content	43.01 (4)	.000*
Entering websites containing violence and terror	11.52 (4)	.021*
Using friendship websites	18.60 (4)	.001*
Trusting the strangers and chatting with them	14.86 (4)	.005*
Sending emails containing viruses intentionally	58.13 (4)	.000*
Overloading inboxes and blocking mail boxes	28.79 (4)	.000*
Forcing people to leave chat-rooms or game websites	32.68 (4)	.000*
Using other people's names in order to cause them to suffer by sending emails or videos	27.77 (4)	.000*
Publishing websites that will cause harm	32.38 (4)	.000*
Hacking email accounts and doing harm	62.49 (4)	.000*
Publishing negative information about others on the internet	36.03 (4)	.000*
Spreading personal information through emails	32.31 (4)	.000*

* $p<.05$

As it can be seen from the results of the analysis that all the unethical behaviors are related with the duration of the internet use (all $p<.05$)

The results of the chi-square analysis to determine the relation between unethical behaviors displayed through the internet and the place where the internet is used are given in Table 3.

As can be seen in Table 3, the most repeated unethical behaviors that the students similarly display when using the internet at home, at school or at an internet cafe are using ready-made homework websites (home 42.7%, school 37.6%, internet cafe 46.4%), using friendship websites (home 20.7%, school 19.9%, internet cafe 25.7%) and using pirated software (home 19.9%, school 18.6%, internet cafe 22.8%). The least repeated behavior that the students using the internet at home display is to enter the websites of violence and terror (3.7%), the least repeated behavior that the students using the internet at school display is to enter the websites having pornographic content (3.1%) and the least repeated behavior that the students using the internet at an internet cafe display is trusting strangers and messaging with them (5.2%). From the results of chi-square, it has been determined that "accessing the private data on the computer without permission", "using ready-made homework websites" and "hacking the email accounts and doing harm are related to using the internet at home; whereas the other unethical behaviors are independent of it. While there is a relation between "using the ready-made homework websites", "entering the websites having pornographic content", "publication of the negative information acquired about someone" and using the internet at school; the other behaviors are independent of using the internet at school. It has been noted that all the unethical behaviors apart from the behavior of "trusting the strangers and messaging with them" are related to using the internet at an internet cafe.

Table 3. The place where the internet is used X The unethical behaviors displayed through the internet

Unethical behaviors displayed through the internet	Home			School			Internet cafe		
	% (f)	Chi-square (df)	p	% (f)	Chi-square (df)	p	% (f)	Chi-square (df)	p
Using pirated software	19.9 (222)	3.85 (1)	.050	18.6 (132)	0.01 (1)	.944	22.8 (109)	8.01 (1)	.005*
Accessing private information on the computer without permission	7.2 (80)	13.74 (1)	.000*	4.5 (32)	2.79 (1)	.095	7.7 (37)	5.55 (1)	.018*
Using ready-made homework websites	42.7 (476)	5.02 (1)	.025*	37.6 (267)	4.60 (1)	.032*	46.4 (222)	9.19 (1)	.003*
Disturbing people on the internet	5.1 (57)	3.31 (1)	.069	3.4 (24)	3.09 (1)	.079	6.3 (30)	5.29 (1)	.021*
Use of materials such as, music, picture, film, program and files without permission	14.9 (166)	0.38 (1)	.536	13.2 (94)	1.48 (1)	.224	19.5 (93)	13.12 (1)	.000*
Giving misinformation over the internet	4.9 (55)	1.79 (1)	.181	3.9 (28)	0.663 (1)	.416	6.1 (29)	4.16 (1)	.041*
Making shameful talks over the internet	3.8 (42)	0.01 (1)	.905	3.2 (23)	1.04 (1)	.308	5.6 (27)	6.10 (1)	.014*
Entering websites containing pornographic content	4.9 (55)	3.35 (1)	.067	3.1 (22)	3.93 (1)	.047*	7.3 (35)	15.10 (1)	.000*
Entering websites containing violence and terror	3.7 (41)	2.56 (1)	.110	4.8 (34)	0.82 (1)	.366	7.3 (35)	15.10 (1)	.000*
Using friendship websites	20.7 (231)	1.49 (1)	.223	19.9 (141)	0.00 (1)	.972	25.7 (123)	14.44 (1)	.000*
Trusting the strangers and chatting with them	4.1 (46)	0.84 (1)	.360	3.7 (26)	0.07 (1)	.797	5.2 (25)	3.64 (1)	.056
Sending emails containing viruses intentionally	11.0 (123)	8.40 (1)	.004	7.9 (56)	3.53 (1)	.060	13.6 (65)	12.94 (1)	.000*
Overloading inboxes and blocking mail boxes	9.8 (109)	0.01 (1)	.916	8.7 (62)	1.60 (1)	.206	13.8 (66)	11.75 (1)	.001*
Forcing people to leave chat-rooms or game websites	9.2 (103)	0.15 (1)	.699	8.7 (62)	0.13 (1)	.721	11.7 (56)	5.76 (1)	.016*
Using other people's names in order to cause them to suffer by sending emails or videos	7.3 (82)	0.97 (1)	.756	7.2 (51)	0.17 (1)	.682	10.5 (50)	8.32 (1)	.004*
Publishing websites that will cause harm	4.1 (46)	2.82 (1)	.093	4.1 (29)	1.23 (1)	.267	8.2 (39)	16.59 (1)	.000*
Hacking email accounts and doing harm	12.5 (140)	6.70 (1)	.010*	9.3 (66)	3.82 (1)	.051	14.6 (70)	8.50 (1)	.004*
Publishing negative information about others on the internet	5.3 (59)	0.29 (1)	.592	4.1 (29)	4.63 (1)	.031*	9.4 (45)	19.23 (1)	.000*
Spreading personal information through emails	5.8 (65)	0.04 (1)	.849	5.4 (38)	0.66 (1)	.418	10.0 (104)	20.20 (1)	.000*

* $p<.05$

The unethical behaviors exposed: The ratios of female and male students who are exposed to unethical behaviors through the internet and the results of the chi-square analysis of being exposed to these behaviors in relation with gender difference are given in Table 4.

Table 4. Gender X The unethical behaviors exposed through the internet

The unethical behaviors exposed through the internet	Female %(f)	Male %(f)	General %(f)	Chi-square (df)	p
Having problems because of computer viruses	40.2 (355)	51.1 (449)	45.7 (804)	20.82 (1)	.000*
Being mistreated due to the sharing of personal information with strangers over the internet	2.2 (19)	5.8 (51)	4.0 (70)	15.35 (1)	.000*
Viewing of messages by others over the internet without permission	5.4 (48)	8.1 (71)	6.8 (119)	4.85 (1)	.028*
Encountering with pornographic and violent content involuntarily while surfing on the internet	12.8 (113)	21.5 (189)	17.1 (302)	23.40 (1)	.000*
Having losses because of friendship websites	3.9 (34)	5.9 (52)	4.9 (86)	4.03 (1)	.045*
Hacking of passwords of users' accounts on the internet	6.7 (59)	10.4 (91)	8.5 (150)	7.58 (1)	.006*
Publishing private information over the internet without permission	3.1 (27)	6.0 (53)	4.5 (80)	8.94 (1)	.003*
Threatening, affront or indecent proposal received from unknown people on the internet	5.2 (46)	7.2 (63)	6.2 (109)	2.89 (1)	.089
Overloading the email accounts and blocking the mails	8.6 (90)	13.6 (141)	11.1 (231)	13.33 (1)	.000*
Forcing people to leave the chat rooms or game websites	8.4 (88)	16.4 (170)	12.4 (258)	30.84 (1)	.000*
Using other people's names in order to cause them to suffer by sending emails or videos	9.9 (104)	14.8 (153)	12.3 (257)	11.31 (1)	.001*
Publishing websites that will cause harm	7.0 (73)	11.2 (116)	9.1 (189)	11.31 (1)	.001*
Hacking email accounts and doing harm	18.2 (191)	22.9 (237)	20.6 (428)	6.91 (1)	.009*
Publishing negative information about others on the internet	6.7 (70)	11.3 (117)	9.0 (187)	13.58 (1)	.000*
Publishing private information through emails	5.1 (53)	11.2 (116)	8.1 (169)	26.36 (1)	.000*

* p<.05

As can be seen in Table 4, the unethical problems that female and male students encounter are respectively "having problems because of computer viruses" (female 40.2%, male 51.1%), "hacking their email accounts and being harmed" (female 18.2%, male 22.9%) and "encountering with pornographic and violent content involuntarily while surfing on the internet" (female 12.8%, male 21.5%). The least encountered ethical problem by both female and male students is, "being mistreated due to the sharing of personal information with strangers over the internet" (female 2.2%, male 5.8%). When the chi-square results are examined, it is seen that all the items apart from the item "threatening, affront or indecent proposal received from unknown people on the internet" are related to gender.

The results of chi-square analysis to determine the relation between the unethical behaviors exposed over the internet and the duration of internet use are given in Table 5.

Table 5. The duration of the internet use X The unethical behaviors exposed over the internet

The unethical behaviors exposed through the internet	Chi-square (df)	p
Having problems because of computer viruses	27.36 (4)	.000*
Being mistreated due to the sharing of personal information with strangers over the internet	6.94 (4)	.139
Viewing of messages by others over the internet without permission	9.61 (4)	.048
Encountering with pornographic and violent content involuntarily while surfing on the internet	44.89 (4)	.000*
Having losses because of friendship websites	16.81 (4)	.002*
Hacking of passwords of users' accounts on the internet	21.63 (4)	.000*
Publishing private information over the internet without permission	12.33 (4)	.015*
Threatening, affront or indecent proposal received from unknown people on the internet	7.93 (4)	.094
Overloading the email accounts and blocking the mails	28.79 (4)	.000*
Forcing people to leave the chat rooms or game websites	32.68 (4)	.000*
Using other people's names in order to cause them to suffer by sending emails or videos	27.77 (4)	.000*
Publishing websites that will cause harm	22.38 (4)	.000*
Hacking email accounts and doing harm	62.49 (4)	.000*
Publishing negative information about others on the internet	36.03 (4)	.000*
Publishing private information through emails	32.31 (4)	.000*

* p<.05

It has been determined that all the ethical problems encountered apart from "suffering losses due to the sharing of private information with strangers over the internet", "viewing of messages by others over the internet" and "threatening, affront or indecent proposal received from unknown people on the internet" are related to the duration of internet use.

The results of chi-square analysis to determine the relation between the unethical behaviors exposed over the internet and the place where the internet is used are given in Table 6.

Table 6. The place where the internet is used X The unethical behaviors exposed over the internet

The unethical behaviors exposed through the internet	Home			School			Internet cafe		
	% (f)	Chi-square (df)	p	% (f)	Chi-square (df)	p	% (f)	Chi-square (df)	p
Having problems because of computer viruses	53.2 (594)	70.37 (1)	.000*	40.7 (289)	11.76 (1)	.001*	45.2 (216)	0.06 (1)	.810
Being mistreated due to the sharing of personal information with strangers over the internet	4.2 (47)	0.45 (1)	.504	2.8 (20)	4.18 (1)	.041*	6.1 (29)	7.52 (1)	.006*
Viewing of messages by others over the internet without permission	6.7 (75)	0.01 (1)	.935	7.0 (50)	0.15 (1)	.696	8.4 (40)	2.70 (1)	.100
Encountering with pornographic and violent content involuntarily while surfing on the internet	19.4 (216)	10.43 (1)	.001	17.3 (123)	0.03 (1)	.873	22.6 (108)	13.69 (1)	.000*
Having losses because of friendship websites	4.7 (52)	0.33 (1)	.566	3.8 (27)	3.00 (1)	.084	6.3 (30)	2.74 (1)	.098
Hacking of passwords of users' accounts on the internet	9.9 (110)	7.01 (1)	.008*	8.5 (60)	0.01 (1)	.934	12.1 (58)	11.01 (1)	.001*
Publishing private information over the internet without permission	4.9 (55)	1.04 (1)	.307	4.8 (34)	0.17 (1)	.684	6.1 (29)	3.51 (1)	.061
Threatening, affront or indecent proposal received from unknown people on the internet	6,8 (76)	2.02 (1)	.155	6.1 (43)	0.04 (1)	.849	8.4 (40)	5.36 (1)	.021*
Overloading the email accounts and blocking the mails	9.8 (173)	0.01 (1)	.916	8.7 (62)	1.60 (1)	.206	13.8 (66)	11.75 (1)	.001*
Forcing people to leave the chat rooms or game websites	9.2 (103)	0.149 (1)	.699	8.7 (62)	0.13 (1)	.721	11.7 (56)	5.76 (1)	.016*
Using other people's names in order to cause them to suffer by sending emails or videos	7.3 (82)	0.10 (1)	.756	7.2 (51)	0.17 (1)	.682	10.5 (50)	8.32 (1)	.004*
Publishing websites that will cause harm	4.1 (46)	2.82 (1)	.093	4.1 (29)	1.23 (1)	.267	8.2 (39)	16.59 (1)	.000*
Hacking email accounts and doing harm	12.5 (140)	6.70 (1)	.010*	9.3 (66)	3.82 (1)	.051	14.6 (70)	8.50 (1)	.004*
Publishing negative information about others on the internet	5.3 (59)	0.29 (1)	.592	4.1 (29)	4.63 (1)	.031*	9.4 (45)	19.23 (1)	.000*
Publishing private information through emails	5.8 (65)	0.04 (1)	.849	5.4 (38)	0.66 (1)	.418	10.0 (48)	20.20 (1)	.000*

* $p<.05$

As can be seen in Table 6, the students using the internet at home, at school or at a internet cafe similarly encounter mostly the problems of "having problems because of computer viruses" (home 53.2%, school 40.7%, internet cafe 45.2%), "encountering with pornographic and violent content involuntarily while surfing on the internet" (home 19.4%, school 17.3%, internet cafe 22.6%) and hacking of email accounts and doing harm (home 12.5%, school 9.3%, internet cafe 14.6%). While the least common ethical problem that the students using the internet at home face is "preparation of websites that will cause harm" (4.1%); the students using the internet at school encounter the problem of "getting harmed due to the publication of private information on the internet" the least (2.8%); the students using the internet at a internet cafe encounter the problem of "getting harmed due to the

publication of private information on the internet" (6.1%) and "publishing private information on the internet" (6.1%) the least. When the chi-square analyses are examined, it is determined that the items "having problems due to computer viruses", "hacking of passwords of users' accounts on the internet" and "hacking of email accounts and doing harm" are related with using the internet at home whereas the other items are independent of it. While the items; "having problems because of computer viruses", "suffering losses due to the sharing of private information with strangers over the internet" and " publication of negative information about others on the internet are related with using the internet at school, the other items are independent of it. However, apart from the unethical behaviors of "having problems because of computer viruses", "viewing of messages by others over the internet without permission", "having losses because of friendship websites" and "publication of private information over the internet without permission", it is determined that all other unethical behaviors are related with using the internet at a internet cafe.

4. Result and Suggestions

4.1. Results

- The most common unethical behaviors that both female and male students display are using ready-made homework websites, friendship websites and pirated software; the least common unethical behaviors they display are making shameful talks over the internet.
- All the unethical behaviors displayed are related to gender and the duration of the internet use.
- While some of the unethical behaviors displayed are related with using the internet at home or at school, almost all of these behaviors are related with using the internet at an internet cafe.
- While the most common unethical behaviors that both female and male students encounter are computer viruses, hacking of their email accounts and getting harmed and encountering with pornographic and violent content involuntarily on the internet", they have suffered from the sharing of private information with strangers over the internet the least.
- Almost all of the unethical behaviors are related to gender.
- Most of the unethical behaviors encountered are related to the duration of internet use.
- While some of the unethical behaviors encountered are related to the use of the internet at home or school, most of these behaviors are related to the use of the internet at a internet cafe.

4.2. Suggestions

- Elementary school students should be informed about using the internet in accord with codes of conduct.
- For the students to be informed on the ethical use of the internet, it is believed that the subject of Information Technologies (IT) holds an important position. It is also believed that it will be useful to list the IT subject among the primarily elective courses and make it mandatory in a very short time and review and reorganise its syllabus by adding issues related to ethics.
- Children's use of the internet must be supervised by their parents. Accordingly, the time children spend on the internet must be limited, supervised by their parents, their activities on the internet must be within their knowledge and the place where the students use the internet must be within the knowledge and control of their parents. Therefore it is believed that an awareness training on the ethical use of the internet for the parents will be of great use.
- It is believed that if the teachers gain awareness on the ethics of the internet, it will be useful for them when they inform both the students and their parents.
- Projects to turn the internet cafes into cultural activity and communication centers must be developed and their development must be encouraged.
- It is necessary to take legal and technical measures for the internet to be used in accord with the codes of conduct.

- More researches to determine the status of elementary school students' internet use, the reasons that lead them to use the internet unethically and to develop solution offers must be carried out.

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